



Grain Transportation Report

A weekly publication of the Agricultural Marketing Service
www.ams.usda.gov/GTR

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July 6, 2023

WEEKLY HIGHLIGHTS

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The next
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July 13, 2023

Montana Trains Rerouted To Bypass Damaged Bridge

On June 24, in Stillwater County, MT, a Montana Rail Link (MRL) train carrying hazardous materials [derailed over a bridge](#), sending 10 cars into the Yellowstone River. Grain is one of the main commodities carried by MRL, along with coal and industrial products. To mitigate the effects of the derailment, approximately 20 trains per day (the typical traffic on the MRL line) are being rerouted onto BNSF Railway's Northern Transcon route. Although the rerouted trains could contribute to congestion, both [grain](#) and non-grain rail traffic have been below average this year. Until Tuesday, July 4, the derailment response focused on site cleanup and remediation, and all cars involved in the derailment have been removed from the river and bridge remains. Since July 4, the focus of the derailment response has shifted to bridge reconstruction. Updates on the MRL derailment are posted [here](#).

ATRI Releases Annual Operational Costs of Trucking Report

The American Transportation Research Institute (ATRI) recently [released](#) its 2023 update to *An Analysis of the Operational Costs of Trucking* report. According to the report, the estimated costs of operating a truck in 2022 were \$2.251 per mile—the highest costs on record and the first time they surpassed \$2 per mile. This rise was due to a 54-percent increase in the price of fuel from 2021 to 2022—the largest vehicle-based cost. Also, from 2021 to 2022, driver wages rose 16 percent, reflecting ongoing challenges to attract and retain drivers. Over the same period, truck/trailer lease or purchase payments rose 19 percent, largely because of supply chain delays. In addition, parts shortages and rising technician labor rates raised repair and maintenance costs 12 percent. Large fleets' average operating margins improved from 2021 to 2022, while small fleets' operating margins declined. Finally, from 2021 to 2022, driver turnover, detention times, and equipment use each improved for almost every fleet size and sector.

Railinc Releases Reports on Demographics of Railcar and Locomotive Fleets

Railinc, a subsidiary of the Association of American Railroads, recently released two free, downloadable industry reports on the demographics of the North American railcar and locomotive fleets. Two main models of covered hoppers are used to ship grain—C-113 and the [larger model, C-114](#). According to the [North American Freight Railcar Review 2023](#), at the end of 2022, the North American revenue-earning fleet contained 90,000 C-113 railcars and 170,000 C-114 railcars. In 2022, the total grain railcar fleet was 1.2 percent larger than in 2021, but 3 percent smaller than the peak in 2018 (267,000 cars). According to Railinc's [North American Locomotive Review 2023](#), at the end of 2022, the North American fleet had 37,704 locomotives—down 284 from the previous year and down 1,817 from the peak in 2017. Since 2017, the fleet's locomotives have declined in number by an average of 1 percent per year, and their average age has risen. However, the newly added models tend to be more powerful and better at hauling heavy loads than older models.

Snapshots by Sector

Export Sales

For the week ending June 22, [unshipped balances](#) of wheat, corn, and soybeans for marketing year (MY) 2022/23 totaled 11.24 million metric tons (mmt), down 4 percent from last week and down 49 percent from the same time last year. Net [corn export sales](#) for MY 2022/23 were 0.140, up 291 percent from last week. Net [soybean export sales](#) were 0.227 mmt, down 50 percent from last week. Net weekly [wheat export sales](#) for MY 2023/24, which began on June 1, were 0.155 mmt, up 41 percent from last week.

Rail

U.S. Class I railroads originated 14,647 [grain carloads](#) during the week ending June 24. This was a 7-percent decrease from the previous week, 29 percent fewer than last year, and 26 percent fewer than the 3-year average.

Average July [shuttle secondary railcar bids/offers](#) (per car) were \$363 below tariff for the week ending June 29. This was \$28 less than last week and \$305 lower than this week last year. Average non-shuttle secondary railcar bids/offers per car were \$17 below tariff. This was \$23 less than last week and \$246 lower than this week last year.

Barge

For the week ending July 1, [barged grain movements](#) totaled 402,500 tons. This was 1 percent more than the previous week and 57 percent less than the same period last year.

For the week ending July 1, 266 grain barges [moved down river](#)—6 more than last week. There were 432 grain barges [unloaded](#) in the New Orleans region, 40 percent more than last week.

Ocean

For the week ending June 29, 19 [oceangoing grain vessels](#) were loaded in the Gulf—10 percent fewer than the same period last year. Within the next 10 days (starting June 30), 25 vessels were expected to be loaded—39 percent fewer than the same period last year.

As of June 29, the rate for shipping a metric ton (mt) of grain from the U.S. Gulf to Japan was \$47.50. This was 2 percent less than the previous week. The rate from the Pacific Northwest to Japan was \$26.00 per mt, 2 percent less than the previous week.

Fuel

For the week ending July 3, the U.S. average [diesel fuel price](#) decreased 3.4 cents from the previous week to \$3.767 per gallon, 190.8 cents below the same week last year.

Feature Article/Calendar

Date	Event	Location	Website for More Information
<i>The following list contains information and links to upcoming events in 2023.</i>			
July 10-11	<p>2023 Midwest Association of Rail Shippers Summer Meeting The 2023 Midwest Association of Rail Shippers (MARS) summer meeting will include speakers from railroads (i.e., CSX, Union Pacific, and CPKC), shippers, and a Surface Transportation Board member. This year's theme is "Delivering Supply Chain Success with Rail Innovation and Sustainability."</p>	Lake Geneva, WI	https://www.mwrailshippers.com/event/2023-summer-meeting/
July 19-20	<p>Inland Waterway Users Board Meeting At the meeting, the Board will receive briefings and presentations on investments, projects, and the state of the U.S. inland waterway system (IWS). Chartered to independently advise the Secretary of the Army, the Board weighs in on investments in construction and rehabilitation, shaping commercial navigation throughout the U.S. IWS.</p>	Paducah, KY	https://www.federalregister.gov/documents/2023/06/21/2023-13094/inland-waterways-users-board-meeting-notice
July 23- 25	<p>2023 Agricultural and Applied Economics Association Meeting The Agricultural and Applied Economics Association (AAEA) annual meeting allows professionals and students in agricultural and applied economics to present and learn about the latest research on a broad range of issues. Issues explored include agriculture, international and rural development, resources and the environment, and more.</p>	Washington, DC	https://www.aaca.org/meetings/2023-aaca-annual-meeting
August 2-4	<p>U.S. Wheat Associates' Latin American and Caribbean Wheat Buyers Conference This conference will convene government, academia, and mill owners. Discussions will center on such topics as grain storage, wheat rail and barge logistics, and strategies for improving the flow of U.S. wheat to Latin America and the Caribbean. U.S. Wheat Associates aims to help develop export markets for the U.S. wheat industry.</p>	Puerto Vallarta, Mexico	https://www.uswheat.org/inscripcion-de-labc/
August 14-16	<p>TEGMA 2023 Fall Symposium and STB National Grain Car Council Meeting Held concurrently with the National Grain Car Council (NGCC) annual meeting, the Transportation, Elevator and Grain Merchants Association's (TEGMA) fall symposium focuses on operational and business issues. NGCC members include representatives from railroads, shippers and receivers, and private car owners and manufacturers.</p>	Kansas City, MO	https://www.tegma.org/2023august
September 11-14	<p>FTR Transportation Conference Each day of the conference, the 2023 FTR Transportation Conference focuses on a specific aspect of either trucking or rail transportation—i.e., truck equipment, truck freight, rail equipment, or rail freight.</p>	Indianapolis, IN and Online	https://www.ftrconference.com/
September 19-21	<p>Inland Rivers Ports and Terminals 2023 Conference The Inland Rivers, Ports and Terminals Annual Conference is an offering of the inland river industry featuring subject-matter-expert speakers and more. The exhibition space facilitates one-on-one interactions for high-quality networking.</p>	Louisville, KY	https://www.irpt.net/conference/
September 25-27	<p>Journal of Commerce Inland Distribution Conference The <i>Journal of Commerce's</i> (JOC) Inland Distribution Conference includes shippers, carriers, third-party logistics companies and brokers, and technology providers. A range of timely topics will be discussed, including outlooks for the economy; trucking and intermodal markets; and risk mitigation for international and domestic shippers.</p>	Chicago, IL	https://events.joc.com/inland/program/theme.html
October 2-4	<p>2023 National Waterways Conference (NWC) Annual Meeting NWC members and attendees discuss current opportunities and challenges to waterways resources, helping to bring about common-sense policies and programs. NWC recognizes the public value of our Nation's water resources and their contribution to a competitive economy, national security, environmental quality, and energy conservation.</p>	Sacramento, CA	https://waterways.org/2023-nwc-annual-meeting/
November 13-15	<p>Waterways Council, Inc., Annual Waterways Symposium The Waterways Council advocates for a modern national system of inland waterway infrastructure and ports. Highlights of the symposium will include an economic outlook presentation and an update by the U.S. Army Corps of Engineers.</p>	New Orleans, LA	https://waterwayscouncil.org/get-involved/annual-waterways-symposium
December 3-5	<p>NGFA - 52nd Country Elevator Conference and Trade Show National Grain and Feed Association's (NGFA) Country Elevator Conference includes grain merchants, elevator operators, feed manufacturers, processors, and grain industry suppliers. The 2022 conference featured a session on "Urgent Issues in Freight Rail Service" and a "Class I Rail Panel."</p>	Louisville, KY	https://www.ngfa.org/upcoming-events/

Grain Transportation Indicators

Table 1

Grain transport cost indicators¹

For the week ending	Truck	Rail		Barge	Ocean	
		Non-Shuttle	Shuttle		Gulf	Pacific
07/05/23	253	320	233	144	212	184
06/28/23	255	325	237	134	217	188

¹Indicator: Base year 2000 = 100. Weekly updates include truck = diesel (\$/gallon); rail = near-month secondary rail market bid and monthly tariff rate with fuel surcharge (\$/car); barge = Illinois River barge rate (index = percent of tariff rate); ocean = routes to Japan (\$/metric ton); n/a = not available due to holiday.

Source: USDA, Agricultural Marketing Service.

Table 2

Market Update: U.S. origins to export position price spreads (\$/bushel)

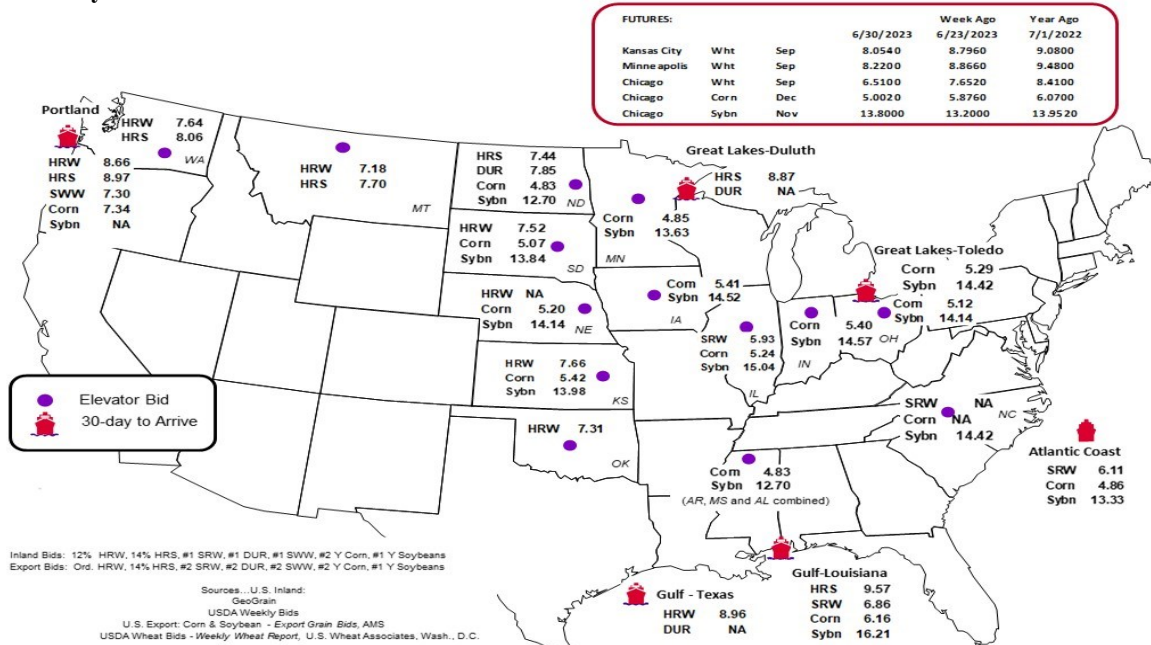
Commodity	Origin-destination	6/30/2023	6/23/2023
Corn	IL-Gulf	-0.92	-0.71
Corn	NE-Gulf	-0.96	-0.76
Soybean	IA-Gulf	-1.69	-1.34
HRW	KS-Gulf	-1.30	-1.32
HRS	ND-Portland	-1.53	-1.63

Note: nq = no quote; n/a = not available; HRW = hard red winter wheat; HRS = hard red spring wheat.

Source: USDA, Agricultural Marketing Service.

The **grain bid summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

Figure 1
Grain bid summary



Rail Transportation

Table 3

Class I rail carrier grain car bulletin (grain carloads originated)

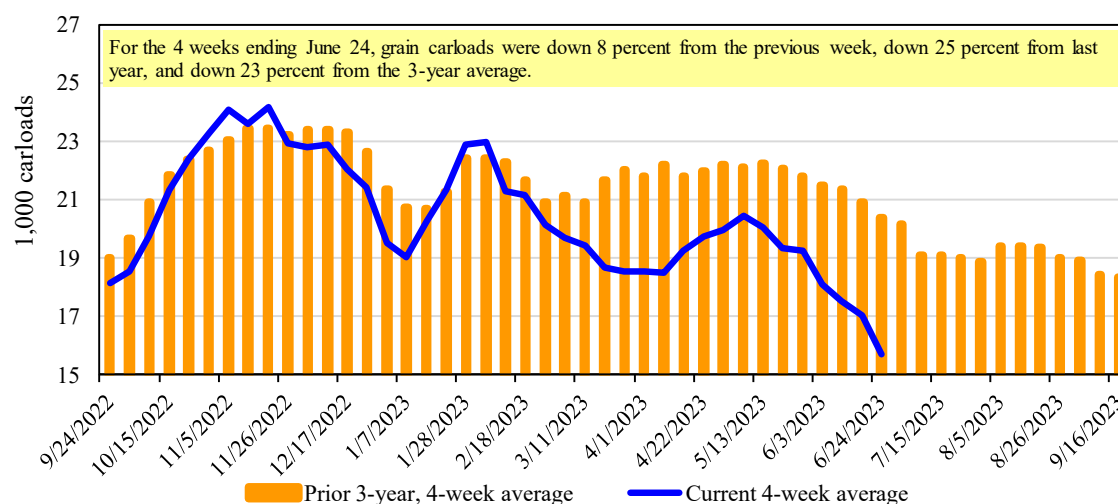
For the week ending: 6/24/2023	East		West		U.S. total	Central U.S./Canada	
	CSXT	NS	BNSF	UP		CPKC	CN
This week	1,583	3,068	6,113	3,883	14,647	5,309	2,949
This week last year	1,592	2,812	10,216	6,004	20,624	8,676	3,314
2023 YTD	48,549	68,127	231,432	137,150	485,258	252,053	115,291
2022 YTD	45,857	60,174	287,280	144,565	537,876	228,418	85,828
2023 YTD as % of 2022 YTD	106	113	81	95	90	110	134
Last 4 weeks as % of 2022	101	112	60	79	75	117	102
Last 4 weeks as % of 3-yr. avg.	110	114	62	81	77	93	88
Total 2022	93,428	130,589	570,232	296,945	1,091,194	538,276	214,074

Note: The last 4-week percentages compare the last 4 weeks of this year to the closest 4 weeks last year, and to the average across the prior 3 years. The U.S. total column excludes CPKC. NS = Norfolk Southern; UP = Union Pacific; CN = Canadian National; CPKC = Canadian Pacific Kansas City; YTD = year-to-date; avg. = average; yr. = year.

Source: Association of American Railroads.

Figure 2

Total weekly U.S. Class I railroad grain carloads



Note: U.S. total excludes Canadian Pacific Kansas City
Source: Association of American Railroads.

Table 4

Railcar auction offerings¹ (\$/car)²

For the week ending: 6/29/2023		Delivery period							
		Jul-23	Jul-22	Aug-23	Aug-22	Sep-23	Sep-22	Oct-23	Oct-22
BNSF	COT grain units	0	0	0	0	no offer	no offer	no offer	no offer
	COT grain single-car	108	0	1	0	34	no offer	0	no offer
UP	GCAS/vouchers	no bid	n/a	no bid	n/a	no offer	n/a	n/a	n/a

¹Auction offerings are for single-car and unit train shipments only.

²Average premium/discount to tariff, last auction. n/a = not available.

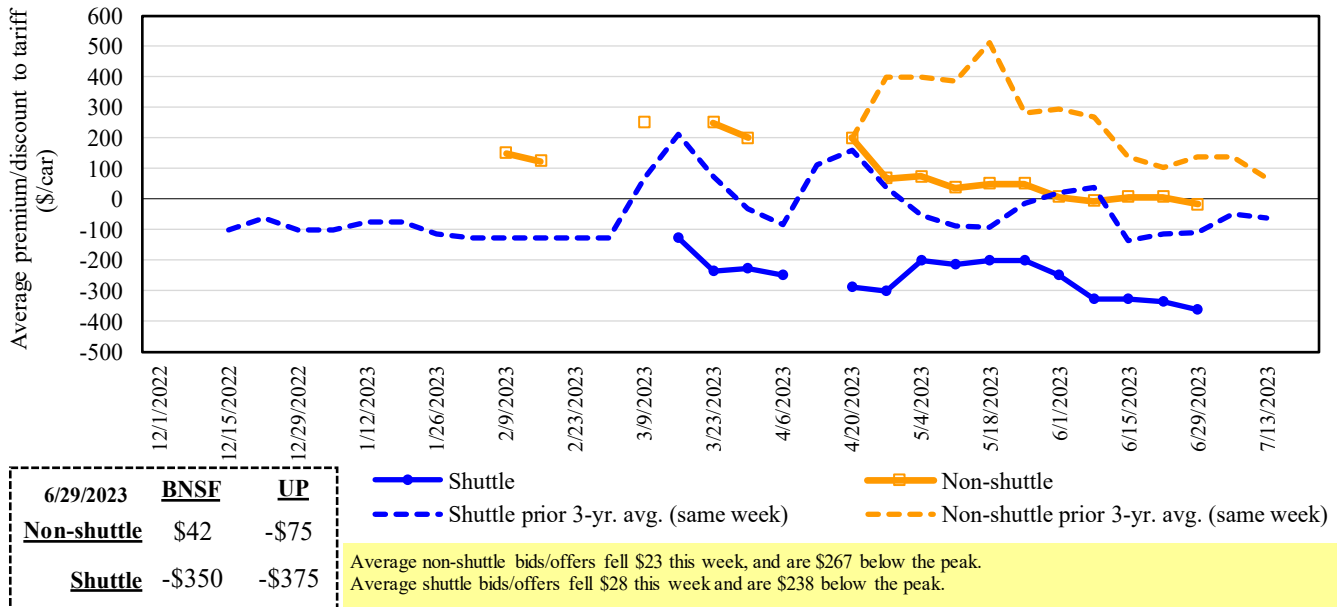
Note: BNSF = BNSF Railway; COT = Certificate of Transportation; UP = Union Pacific Railroad; and GCAS = Grain Car Allocation System.

Minimum bids for UP GCAS/vouchers are \$10.

Source: USDA, Agricultural Marketing Service.

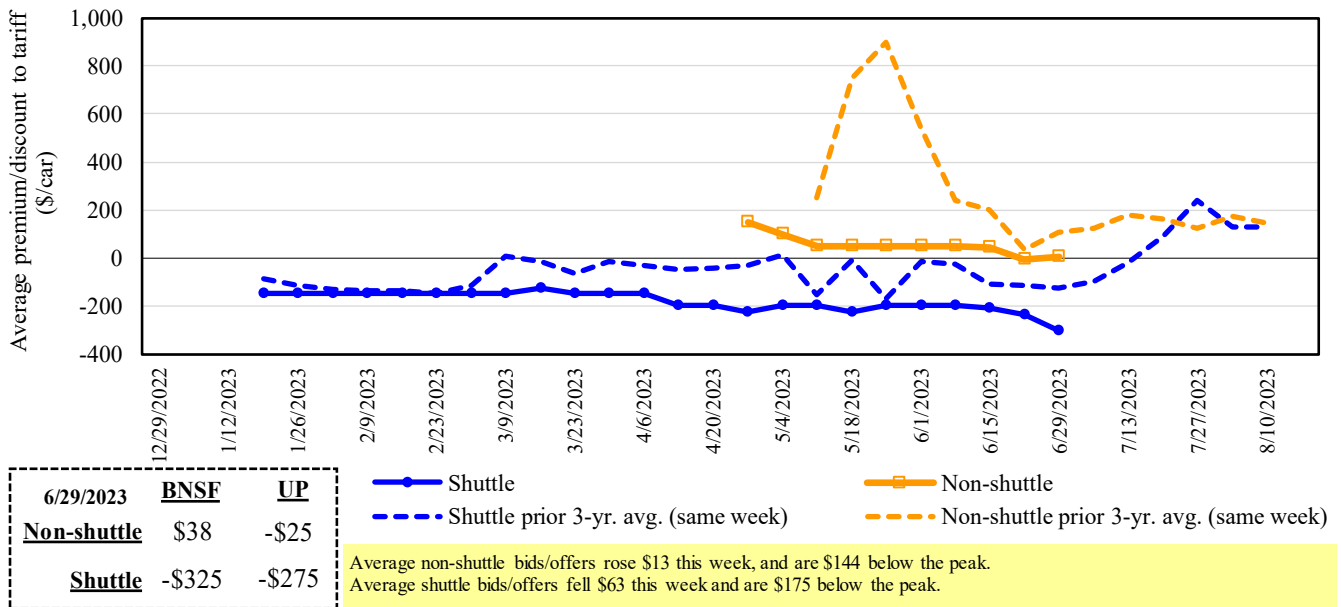
The **secondary rail market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The **auction and secondary rail** values are indicators of rail service quality and demand/supply.

Figure 3
Secondary market bids/offers for railcars to be delivered in July 2023



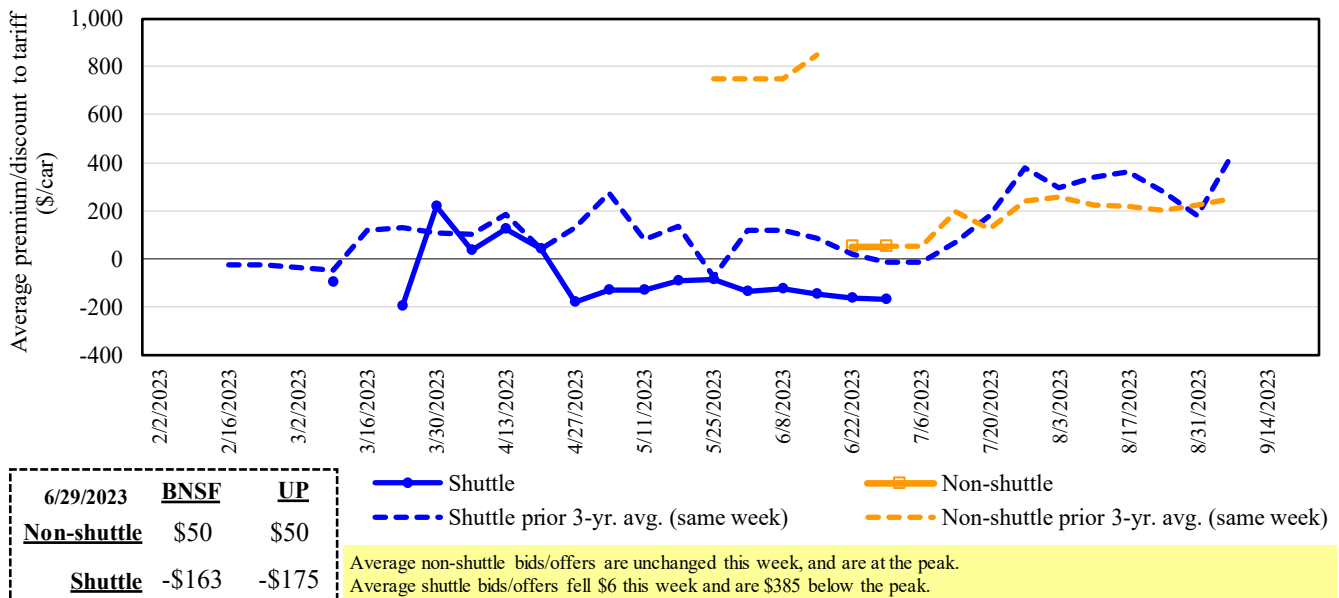
Note: Non-shuttle bids include unit-train and single-car bids. n/a = not available; avg. = average; yr. = year; BNSF = BNSF Railway; UP = Union Pacific Railroad
 Source: USDA, Agricultural Marketing Service.

Figure 4
Secondary market bids/offers for railcars to be delivered in August 2023



Note: Non-shuttle bids include unit-train and single-car bids. n/a = not available; avg. = average; yr. = year; BNSF = BNSF Railway; UP = Union Pacific Railroad
 Source: USDA, Agricultural Marketing Service.

Figure 5
Secondary market bids/offers for railcars to be delivered in September 2023



Note: Non-shuttle bids include unit-train and single-car bids. n/a = not available; avg. = average; yr. = year; BNSF = BNSF Railway; UP = Union Pacific Railroad
 Source: USDA, Agricultural Marketing Service.

Table 5
Weekly secondary railcar market (\$/car)¹

For the week ending: 6/29/2023		Delivery period					
		Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
Non-shuttle	BNSF-GF	42	38	50	n/a	n/a	n/a
	Change from last week	4	-1	0	n/a	n/a	n/a
	Change from same week 2022	-67	13	n/a	n/a	n/a	n/a
	UP-Pool	-75	-25	50	n/a	n/a	n/a
	Change from last week	-50	25	n/a	n/a	n/a	n/a
	Change from same week 2022	-425	-325	0	n/a	n/a	n/a
Shuttle	BNSF-GF	-350	-325	-163	n/a	n/a	n/a
	Change from last week	-106	-100	-13	n/a	n/a	n/a
	Change from same week 2022	-102	-81	-63	n/a	n/a	n/a
	UP-Pool	-375	-275	-175	100	n/a	n/a
	Change from last week	50	-25	0	-50	n/a	n/a
	Change from same week 2022	-508	-425	-675	-1,100	n/a	n/a
	CP-GF	-100	n/a	n/a	n/a	n/a	n/a
	Change from last week	0	n/a	n/a	n/a	n/a	n/a
Change from same week 2022	0	n/a	n/a	n/a	n/a	n/a	

¹ Average premium/discount to tariff, \$/car-last week.

Note: Bids listed are market indicators only and are not guaranteed prices. n/a = not available;

GF = guaranteed freight; Pool = guaranteed pool; BNSF = BNSF Railway; UP = Union Pacific Railroad; CP = Canadian Pacific Railway.

Data from The Malsam Co., Tradewest Brokerage Co.

Source: USDA, Agricultural Marketing Service.

Table 6

Tariff rail rates for unit and shuttle train shipments¹

July 2023	Origin region ³	Destination region ³	Tariff rate/car	Fuel surcharge per car	Tariff plus surcharge per:		Percent change Y/Y ⁴
					metric ton	bushel ²	
Unit train							
Wheat	Wichita, KS	St. Louis, MO	\$4,095	\$187	\$42.52	\$1.16	1
	Grand Forks, ND	Duluth-Superior, MN	\$3,858	\$51	\$38.81	\$1.06	2
	Wichita, KS	Los Angeles, CA	\$7,640	\$260	\$78.45	\$2.14	-6
	Wichita, KS	New Orleans, LA	\$4,825	\$329	\$51.18	\$1.39	-1
	Sioux Falls, SD	Galveston-Houston, TX	\$7,376	\$214	\$75.37	\$2.05	-5
	Colby, KS	Galveston-Houston, TX	\$5,075	\$361	\$53.98	\$1.47	-2
	Amarillo, TX	Los Angeles, CA	\$5,121	\$502	\$55.84	\$1.52	-7
Corn	Champaign-Urbana, IL	New Orleans, LA	\$4,000	\$372	\$43.42	\$1.10	-7
	Toledo, OH	Raleigh, NC	\$8,551	\$413	\$89.01	\$2.26	1
	Des Moines, IA	Davenport, IA	\$2,655	\$79	\$27.15	\$0.69	3
	Indianapolis, IN	Atlanta, GA	\$6,593	\$310	\$68.55	\$1.74	1
	Indianapolis, IN	Knoxville, TN	\$5,564	\$201	\$57.25	\$1.45	3
	Des Moines, IA	Little Rock, AR	\$4,250	\$232	\$44.50	\$1.13	1
	Des Moines, IA	Los Angeles, CA	\$6,130	\$675	\$67.57	\$1.72	-5
Soybeans	Minneapolis, MN	New Orleans, LA	\$3,472	\$546	\$39.91	\$1.09	-27
	Toledo, OH	Huntsville, AL	\$7,037	\$294	\$72.80	\$1.98	1
	Indianapolis, IN	Raleigh, NC	\$7,843	\$419	\$82.04	\$2.23	1
	Indianapolis, IN	Huntsville, AL	\$5,689	\$199	\$58.47	\$1.59	3
	Champaign-Urbana, IL	New Orleans, LA	\$4,865	\$372	\$52.01	\$1.42	-2
Shuttle train							
Wheat	Great Falls, MT	Portland, OR	\$4,393	\$150	\$45.11	\$1.23	-4
	Wichita, KS	Galveston-Houston, TX	\$4,611	\$116	\$46.95	\$1.28	-6
	Chicago, IL	Albany, NY	\$7,090	\$390	\$74.28	\$2.02	1
	Grand Forks, ND	Portland, OR	\$6,051	\$258	\$62.66	\$1.71	-6
	Grand Forks, ND	Galveston-Houston, TX	\$5,399	\$269	\$56.29	\$1.53	-8
	Colby, KS	Portland, OR	\$5,923	\$592	\$64.69	\$1.76	-7
	Corn	Minneapolis, MN	Portland, OR	\$5,660	\$315	\$59.33	\$1.51
Sioux Falls, SD		Tacoma, WA	\$5,620	\$288	\$58.67	\$1.49	-7
Champaign-Urbana, IL		New Orleans, LA	\$4,170	\$372	\$45.11	\$1.15	-2
Lincoln, NE		Galveston-Houston, TX	\$4,360	\$168	\$44.96	\$1.14	-3
Des Moines, IA		Amarillo, TX	\$4,670	\$291	\$49.27	\$1.25	0
Minneapolis, MN		Tacoma, WA	\$5,660	\$312	\$59.31	\$1.51	-8
Council Bluffs, IA		Stockton, CA	\$5,580	\$323	\$58.62	\$1.49	-8
Soybeans		Sioux Falls, SD	Tacoma, WA	\$6,350	\$288	\$65.92	\$1.79
	Minneapolis, MN	Portland, OR	\$6,400	\$315	\$66.68	\$1.81	-7
	Fargo, ND	Tacoma, WA	\$6,250	\$256	\$64.61	\$1.76	-5
	Council Bluffs, IA	New Orleans, LA	\$5,095	\$429	\$54.86	\$1.49	-3
	Toledo, OH	Huntsville, AL	\$5,277	\$294	\$55.33	\$1.51	1
Grand Island, NE	Portland, OR	\$5,730	\$606	\$62.92	\$1.71	-1	

¹A unit train refers to shipments of at least 25 cars. Shuttle train rates are generally available for qualified shipments of

75-120 cars that meet railroad efficiency requirements.

²Approximate load per car = 111 short tons (100.7 metric tons): corn 56 pounds per bushel (lbs/bu), wheat and soybeans 60 lbs/bu.

³Regional economic areas are defined by the Bureau of Economic Analysis (BEA).

⁴Percentage change year over year (Y/Y) calculated using tariff rate plus fuel surcharge.

Source: BNSF Railway, Canadian National Railway, CSX Transportation, and Union Pacific Railroad.

Table 7

Tariff rail rates for U.S. bulk grain shipments to Mexico

Date: December 2021					Tariff rate plus		Percent change ⁴
Commodity	Origin state	Destination region	Tariff rate per car ¹	Fuel surcharge per car ²	fuel surcharge per:		
					metric ton ³	bushel ³	
Wheat	MT	Chihuahua, CI	\$7,699	\$0	\$78.67	\$2.14	4
	OK	Cuautilan, EM	\$6,900	\$230	\$72.85	\$1.98	6
	KS	Guadalajara, JA	\$7,619	\$719	\$85.19	\$2.32	7
	TX	Salinas Victoria, NL	\$4,420	\$138	\$46.57	\$1.27	4
Corn	IA	Guadalajara, JA	\$9,102	\$663	\$99.77	\$2.53	6
	SD	Celaya, GJ	\$8,300	\$0	\$84.81	\$2.15	2
	NE	Queretaro, QA	\$8,322	\$462	\$89.75	\$2.28	5
	SD	Salinas Victoria, NL	\$6,905	\$0	\$70.55	\$1.79	0
	MO	Tlalnepantla, EM	\$7,687	\$450	\$83.14	\$2.11	5
	SD	Torreon, CU	\$7,825	\$0	\$79.95	\$2.03	2
Soybeans	MO	Bojay (Tula), HG	\$8,647	\$614	\$94.63	\$2.57	5
	NE	Guadalajara, JA	\$9,207	\$646	\$100.67	\$2.74	5
	IA	El Castillo, JA	\$9,510	\$0	\$97.17	\$2.64	1
	KS	Torreon, CU	\$8,109	\$466	\$87.61	\$2.38	5
Sorghum	NE	Celaya, GJ	\$7,932	\$597	\$87.15	\$2.21	6
	KS	Queretaro, QA	\$8,108	\$287	\$85.77	\$2.18	3
	NE	Salinas Victoria, NL	\$6,713	\$231	\$70.94	\$1.80	3
	NE	Torreon, CU	\$7,225	\$438	\$78.29	\$1.99	6

¹Rates are based upon published tariff rates for high-capacity shuttle trains. Shuttle trains are available for qualified shipments of 75-110 cars that meet railroad efficiency requirements.

²Fuel surcharge adjusted to reflect the change in Ferrocarril Mexicano, S.A. de C.V railroad fuel surcharge policy as of 10/01/2009.

³Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu.

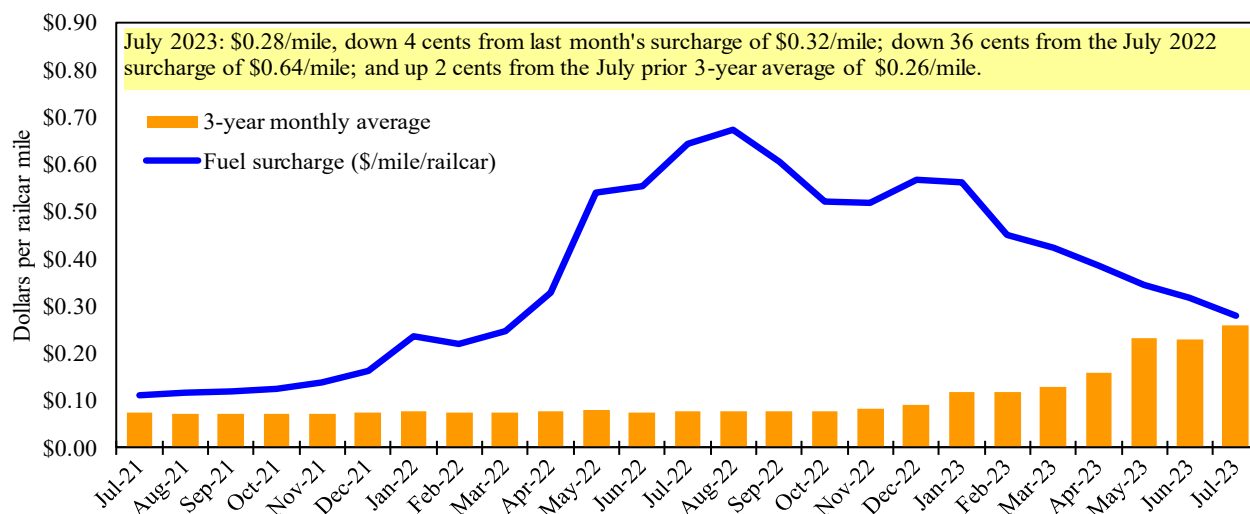
⁴Percentage change calculated using tariff rate plus fuel surcharge; Y/Y = year over year.

⁵As of January 1, 2022, both BNSF and Union Pacific changed their billing and reporting of rates to Mexico.

As we incorporate the change, Table 7 updates will be delayed.

Sources: BNSF Railway, Union Pacific Railroad, Kansas City Southern.

Figure 6

Railroad fuel surcharges, North American weighted average¹

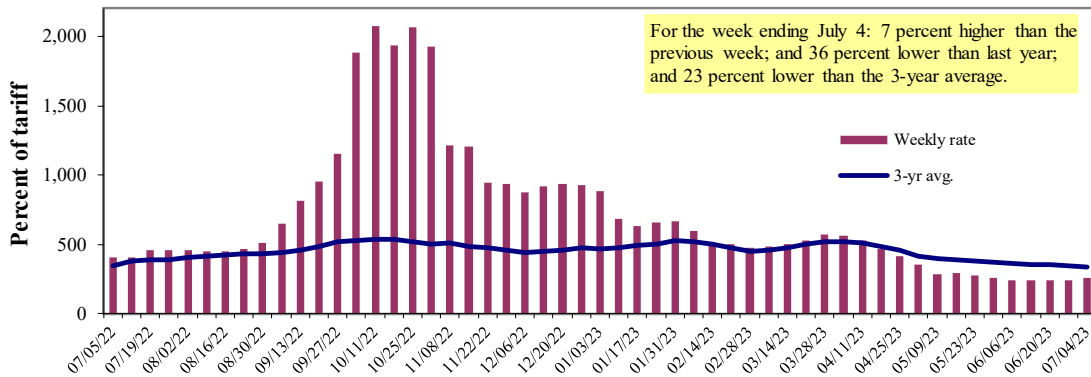
¹Weighted by each Class I railroad's proportion of grain traffic for the prior year.

Sources: BNSF Railway, Canadian National Railway, CSX Transportation, Canadian Pacific Railway, Union Pacific Railroad, Kansas City Southern Railway, Norfolk Southern Corporation.

Barge Transportation

Figure 7

Illinois River barge freight rate^{1,2}



¹Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); ²4-week moving average of the 3-year average.
Source: USDA, Agricultural Marketing Service.

Table 8

Weekly barge freight rates: Southbound only

		Twin Cities	Mid-Mississippi	Lower Illinois River	St. Louis	Cincinnati	Lower Ohio	Cairo-Memphis
Rate¹	7/4/2023	329	290	259	243	233	233	234
	6/27/2023	323	270	242	223	233	233	232
\$/ton	7/4/2023	20.37	15.43	12.02	9.70	10.93	9.41	7.35
	6/27/2023	19.99	14.36	11.23	8.90	10.93	9.41	7.28
Current week % change from the same week:								
	Last year	-38	-34	-36	-25	-47	-47	-30
	3-year avg. ²	-27	-19	-23	-3	-20	-20	-4
Rate¹	August	444	369	359	325	369	369	342
	October	644	618	613	592	613	613	622

¹Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); ²4-week moving average; ton = 2,000 pounds; "-" data not available.
Source: USDA, Agricultural Marketing Service.

Figure 8 Benchmark tariff rates

Calculating barge rate per ton:
(Rate * 1976 tariff benchmark rate per ton)/100

Select applicable index from market quotes are included in tables on this page. The 1976 benchmark rates per ton are provided in map.

Map Credit: USDA, Agricultural Marketing Service

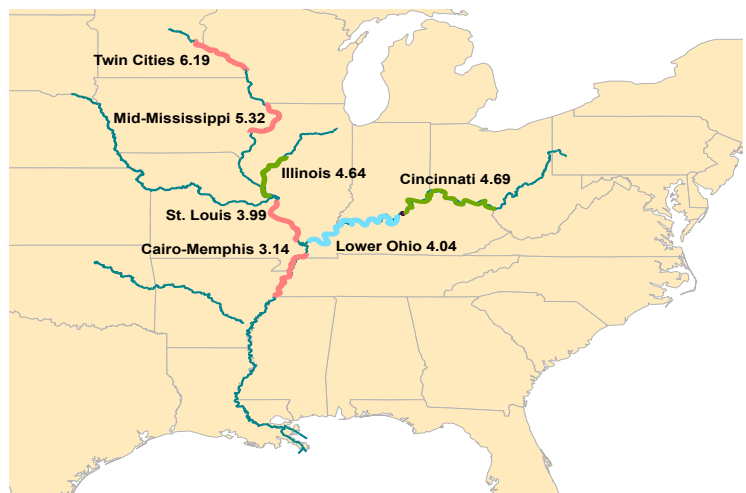
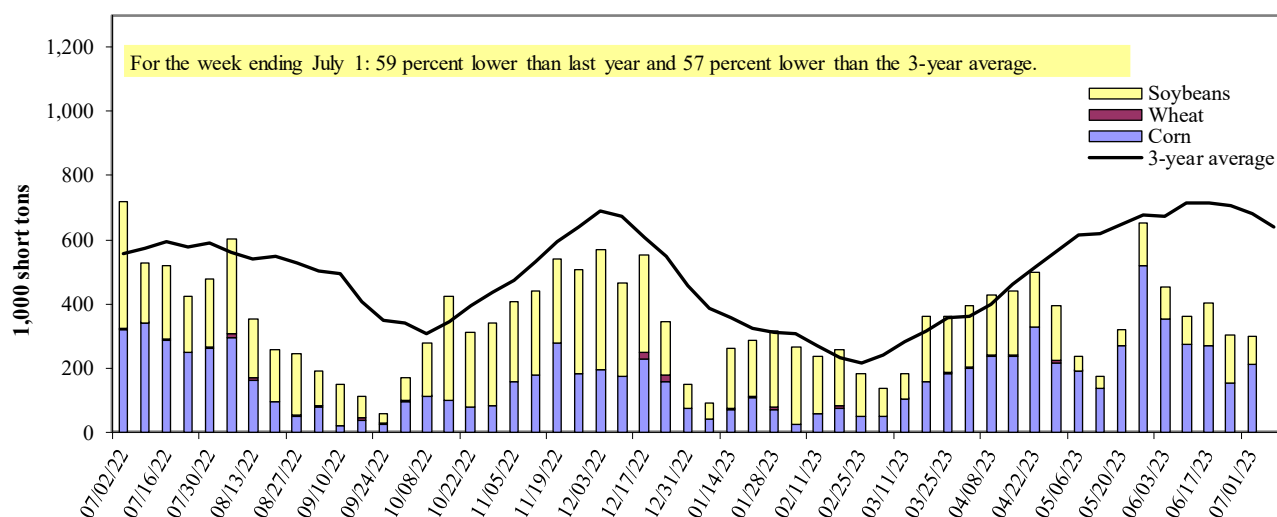


Figure 9

Barge movements on the Mississippi River¹ (Locks 27 - Granite City, IL)



¹ The 3-year average is a 4-week moving average.

Note: The U.S. Army Corps of Engineers has recently migrated its lock and vessel database and has noted the latest data may be revised in coming weeks.

Source: U.S. Army Corps of Engineers.

Table 9

Barged grain movements (1,000 tons)

For the week ending 07/01/2023	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	100	0	85	0	185
Winfield, MO (L25)	114	0	55	0	169
Alton, IL (L26)	192	0	85	0	278
Granite City, IL (L27)	212	0	85	0	297
Illinois River (La Grange)	38	2	27	0	67
Ohio River (Olmsted)	46	9	25	0	80
Arkansas River (L1)	0	26	0	0	26
Weekly total - 2023	258	35	110	0	403
Weekly total - 2022	404	67	459	3	933
2023 YTD ¹	7,649	618	5,788	154	14,208
2022 YTD ¹	10,719	879	6,444	145	18,188
2023 as % of 2022 YTD	71	70	90	106	78
Last 4 weeks as % of 2022 ²	62	49	45	9	54
Total 2022	16,437	1,594	14,464	232	32,727

¹ Weekly total, YTD (year-to-date), and calendar year total include MI/27, OH/Olmsted, and AR/1; Other refers to oats, barley, sorghum, and rye. Total may not add exactly due to rounding.

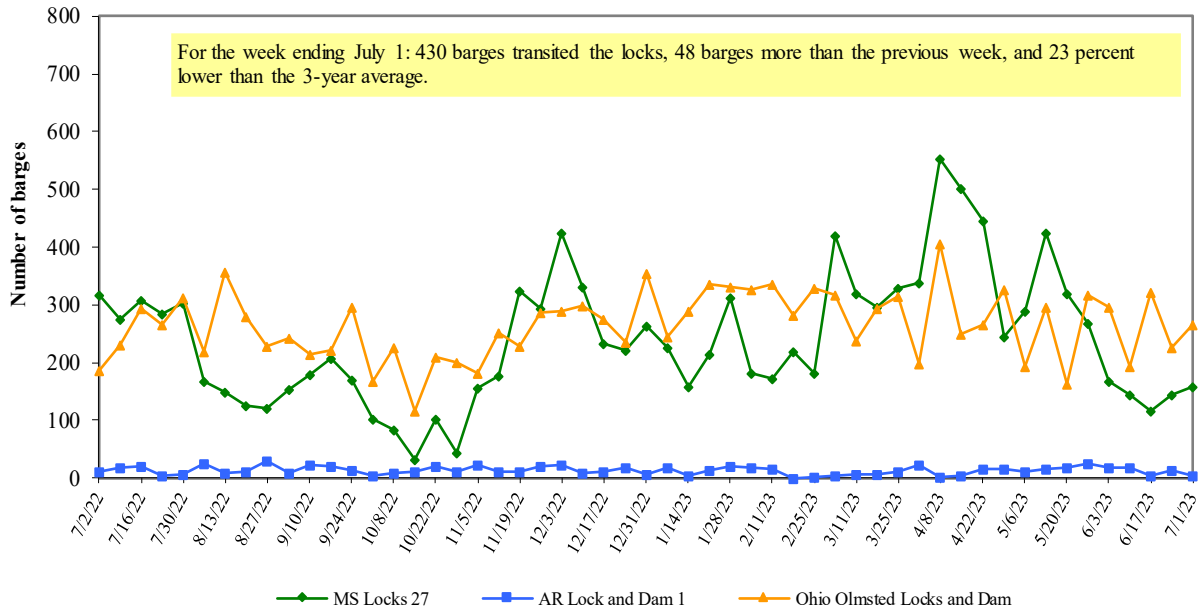
² As a percent of same period in 2022.

Note: L (as in "L15") refers to a lock, locks, or locks and dam facility. The U.S. Army Corps of Engineers has recently migrated its lock and vessel database and has noted the latest data may be revised in coming weeks.

Source: U.S. Army Corps of Engineers.

Figure 10

Upbound empty barges transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Olmsted Locks and Dam

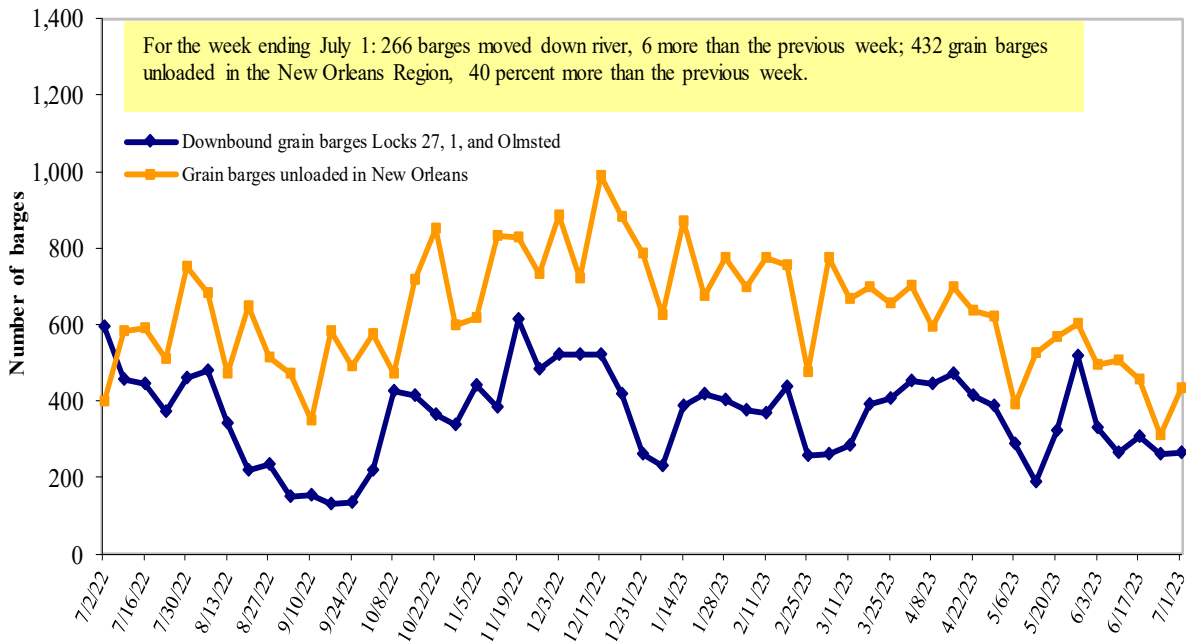


Note: The U.S. Army Corps of Engineers has recently migrated its lock and vessel database and has noted the latest data may be revised in coming weeks.

Source: U.S. Army Corps of Engineers.

Figure 11

Grain barges for export in New Orleans region



Note: Olmsted = Olmsted Locks and Dam. The U.S. Army Corps of Engineers has recently migrated its lock and vessel database and has noted the latest data may be revised in coming weeks.

Source: U.S. Army Corps of Engineers and USDA, Agricultural Marketing Service.

Truck Transportation

The **weekly diesel price** provides a proxy for trends in U.S. truck rates as diesel fuel is a significant expense for truck grain movements.

Table 10

Retail on-highway diesel prices, week ending 7/3/2023 (U.S. \$/gallon)

Region	Location	Price	Change from	
			Week ago	Year ago
I	East Coast	3.811	-0.042	-1.902
	New England	4.090	-0.020	-1.829
	Central Atlantic	4.071	-0.031	-1.893
	Lower Atlantic	3.686	-0.049	-1.911
II	Midwest	3.704	-0.030	-1.943
III	Gulf Coast	3.468	-0.042	-1.862
IV	Rocky Mountain	3.950	-0.072	-1.782
	West Coast	4.412	-0.003	-1.977
V	West Coast less California	4.109	-0.014	-1.927
	California	4.762	0.011	-2.017
	Total	United States	3.767	-0.034

¹Diesel fuel prices include all taxes. Prices represent an average of all types of diesel fuel.

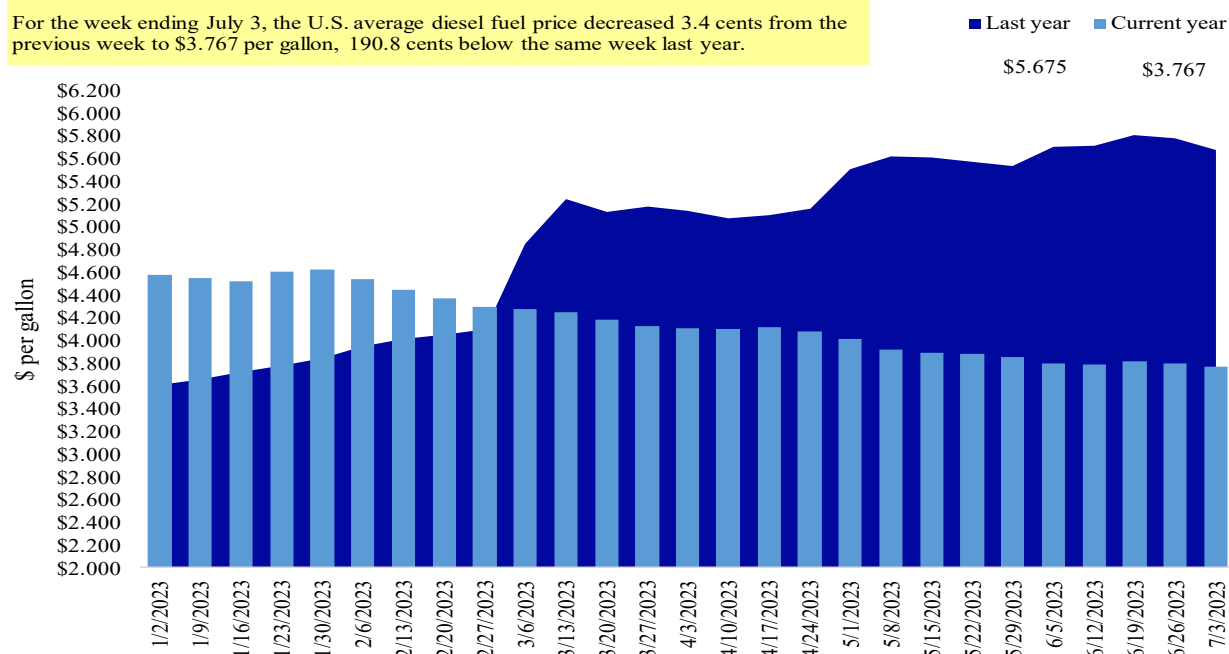
Note: On June 13, the Energy Information Administration implemented a new methodology to estimate weekly on-highway diesel fuel prices.

Source: U.S. Department of Energy, Energy Information Administration.

Figure 12

Weekly diesel fuel prices, U.S. average

For the week ending July 3, the U.S. average diesel fuel price decreased 3.4 cents from the previous week to \$3.767 per gallon, 190.8 cents below the same week last year.



Note: On June 13, 2022 the Energy Information Administration implemented a new methodology to estimate weekly on-highway diesel fuel prices.

Source: U.S. Department of Energy, Energy Information Administration, Retail On-Highway Diesel Prices.

Grain Exports

Table 11

U.S. export balances and cumulative exports (1,000 metric tons)

For the week ending	Wheat					All wheat	Corn	Soybeans	Total
	HRW	SRW	HRS	SWW	DUR				
Export balances¹									
6/22/2023	731	1,113	1,025	501	93	3,463	4,537	3,236	11,235
This week year ago	1,343	996	1,268	899	104	4,610	8,953	8,389	21,953
Cumulative exports-marketing year²									
2022/23 YTD	183	128	251	190	2	753	34,252	49,098	84,103
2021/22 YTD	340	151	403	248	18	1,160	51,471	51,597	104,227
YTD 2022/23 as % of 2021/22	54	84	62	77	9	65	67	95	81
Last 4 wks. as % of same period 2021/22	51	111	85	61	90	76	61	37	55
Total 2021/22	7,172	2,786	5,254	3,261	196	18,669	59,764	57,189	135,622
Total 2020/21	8,422	1,790	7,500	6,438	656	24,807	66,958	60,571	152,335

¹ Current unshipped (outstanding) export sales to date.

² Shipped export sales to date.

Note: marketing year: wheat = 6/01-5/31, corn and soybeans = 9/01-8/31. YTD = year-to-date; wks. = weeks; HRW= hard red winter; SRW = soft red winter; HRS= hard red spring; SWW= soft white wheat; DUR= durum.

Source: USDA, Foreign Agricultural Service.

Table 12

Top 5 importers¹ of U.S. corn

For the week ending 6/22/2023	Total commitments ²			% change current MY from last MY	Exports ³ 3-yr. avg. 2019-21
	2023/24	2022/23	2021/22		
	next MY	current MY	last MY		
		1,000 mt -			-1,000 mt -
Mexico	2,062	14,682	16,468	(11)	15,227
China	272	7,580	14,659	(48)	12,616
Japan	523	6,341	9,700	(35)	10,273
Columbia	0	2,162	4,345	(50)	4,398
Korea	0	819	1,473	(44)	2,563
Top 5 importers	2,858	31,585	46,643	(32)	45,077
Total U.S. corn export sales	3,150	38,788	60,424	(36)	56,665
% of YTD current month's export projection	6%	88%	96%		
Change from prior week ²	124	140	89		
Top 5 importers' share of U.S. corn export sales	91%	81%	77%		80%
USDA forecast June 2023	53,435	43,893	62,875	(30)	
Corn use for ethanol USDA forecast, June 2023	134,620	133,350	135,281	(1)	

¹Based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for 2021/22; marketing year (MY) = Sep 1 - Aug 31.

²Cumulative exports (shipped) + outstanding sales (unshipped), FAS weekly export sales report, or export sales query. Total commitments change (net sales) from prior week could include revisions from previous week's outstanding sales or accumulated sales.

³FAS marketing year ranking reports (carryover plus accumulated export); yr. = year; avg. = average; YTD = year to date.

Note: A red number in parentheses indicates a negative number; mt = metric ton.

Source: USDA, Foreign Agricultural Service.

Table 13

Top 5 importers¹ of U.S. soybeans

For the week ending 6/22/2023	Total commitments ²			% change current MY from last MY	Exports ³ 3-yr. avg. 2019-21
	2023/24 next MY	2022/23 current MY	2021/22 last MY		
	1,000 mt -				-1,000 mt -
China	1,452	31,169	30,550	2	27,283
Mexico	375	4,640	5,325	(13)	4,929
Egypt	0	1,178	4,093	(71)	3,553
Japan	115	2,312	2,418	(4)	2,266
Indonesia	1	1,540	1,651	(7)	2,116
Top 5 importers	1,942	40,839	44,036	(7)	40,147
Total U.S. soybean export sales	3,352	52,334	59,986	(13)	54,231
% of projected exports	6%	96%	102%		
change from prior week ²	152	227	(184)		
Top 5 importers' share of U.S. soybean export sales	58%	78%	73%		74%
USDA forecast, June 2023	53,815	54,496	58,801	(7)	

¹Based on USDA, Foreign Agricultural Service (FAS) marketing year ranking reports for 2021/22; marketing year (MY) = Sep 1 - Aug 31.

²Cumulative exports (shipped) + outstanding sales (unshipped), FAS weekly export sales report, or export sales query. Total commitments change (net sales) from prior week could include revisions from previous week's outstanding sales or accumulated sales.

³FAS marketing year ranking reports (carryover plus accumulated export); yr. = year; avg. = average; YTD = year to date.

Note: A red number in parentheses indicates a negative number; mt = metric ton.

Source: USDA, Foreign Agricultural Service.

Table 14

Top 10 importers¹ of all U.S. wheat

For the week ending 6/22/2023	Total commitments ²		% change current MY from last MY	Exports ³ 3-yr. avg. 2020-22
	2023/24 current MY	2022/23 last MY		
	1,000 mt -			-1,000 mt -
Mexico	722	1,080	(33)	3,397
Philippines	572	901	(37)	2,615
Japan	476	575	(17)	2,281
China	17	0	0	1,740
Korea	308	373	(18)	1,426
Nigeria	50	308	(84)	1,276
Taiwan	279	127	120	944
Thailand	49	125	(61)	643
Colombia	66	243	(73)	537
Indonesia	10	11	(5)	469
Top 10 importers	2,550	3,742	(32)	15,327
Total U.S. wheat export sales	4,216	5,770	(27)	20,411
% of projected exports	21%	27%		
change from prior week ²	155	497		
Top 10 importers' share of U.S. wheat export sales	60%	65%		75%
USDA forecast, June 2023	19,755	21,117	(6)	

¹Based on USDA, Foreign Agricultural Service(FAS) marketing year ranking reports for 2022/23; Marketing year (MY) = Jun 1 - May 31.

²Cumulative exports (shipped) + outstanding sales (unshipped), FAS weekly export sales report, or export sales query. The total commitments change (net sales) from prior week could include revisions from the previous week's outstanding and/or accumulated sales.

³FAS marketing year ranking reports (carryover plus accumulated export); yr. = year; avg. = average.

Note: A red number in parentheses indicates a negative number.

Source: USDA, Foreign Agricultural Service.

Table 15

Grain inspections for export by U.S. port region (1,000 metric tons)

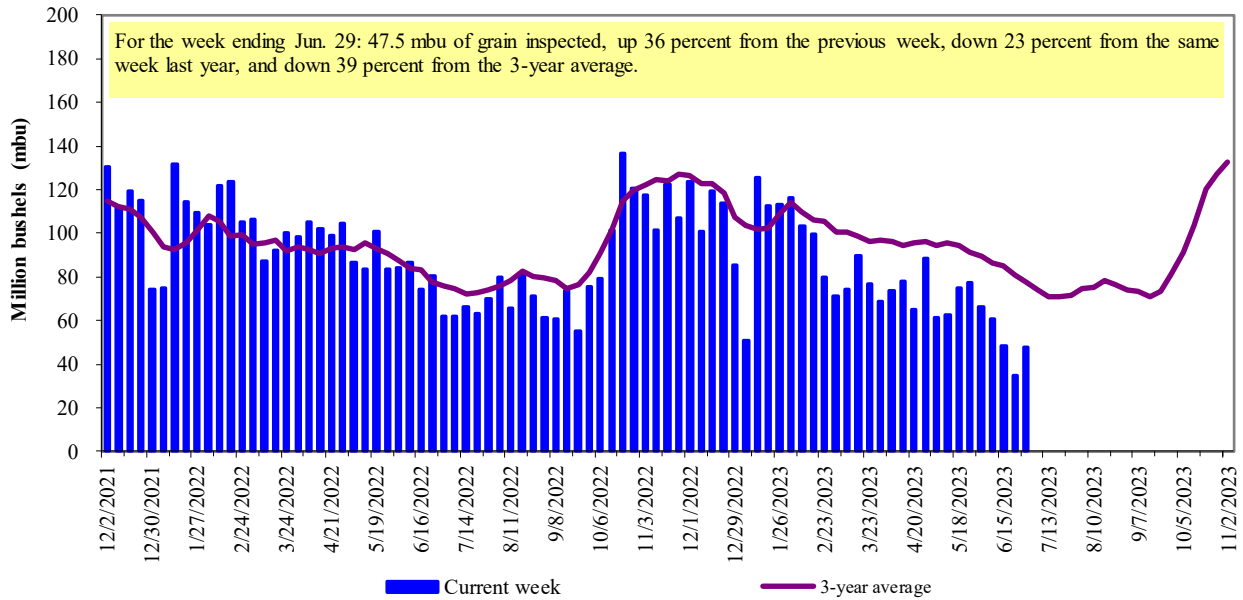
Port regions	For the week ending 06/29/23	Previous week*	Current week as % of previous	2023 YTD*	2022 YTD*	2023 YTD as % of 2022 YTD	Last 4-weeks as % of:		2022 total*
							Last year	Prior 3-yr. avg.	
Pacific Northwest									
Wheat	190	171	112	5,219	4,643	112	108	73	9,836
Corn	36	36	101	3,923	7,838	50	39	34	9,615
Soybeans	0	0	n/a	3,521	4,495	78	0	0	14,178
Total	226	206	110	12,663	16,976	75	57	49	33,629
Mississippi Gulf									
Wheat	60	27	223	1,435	2,069	69	53	60	4,053
Corn	444	376	118	14,146	21,136	67	84	75	30,781
Soybeans	198	60	329	13,100	11,814	111	38	51	31,283
Total	702	463	152	28,680	35,019	82	67	68	66,116
Texas Gulf									
Wheat	59	0	n/a	1,262	1,662	76	25	16	3,421
Corn	0	0	n/a	112	378	30	7	5	648
Soybeans	0	0	n/a	52	2	n/a	n/a	n/a	685
Total	60	0	n/a	1,426	2,041	70	23	15	4,754
Interior									
Wheat	44	18	249	1,237	1,466	84	52	61	2,912
Corn	148	130	115	4,710	4,820	98	86	89	8,961
Soybeans	61	86	71	3,113	3,695	84	61	66	7,109
Total	254	233	109	9,060	9,981	91	73	78	18,982
Great Lakes									
Wheat	0	0	n/a	148	111	133	n/a	61	395
Corn	0	0	n/a	23	100	23	0	0	158
Soybeans	0	0	n/a	31	221	14	0	0	760
Total	0	0	n/a	202	432	47	59	33	1,312
Atlantic									
Wheat	0	0	n/a	58	37	155	n/a	873	169
Corn	3	0	n/a	78	184	42	15	45	309
Soybeans	4	7	59	1,202	1,531	78	19	45	2,867
Total	7	7	97	1,337	1,753	76	23	57	3,345
U.S. total from ports*									
Wheat	354	215	165	9,359	9,989	94	74	58	20,786
Corn	632	541	117	22,991	34,455	67	70	65	50,471
Soybeans	263	154	171	21,019	21,758	97	38	52	56,882
Total	1,249	910	137	53,369	66,202	81	63	61	128,139

*Data includes revisions from prior weeks; some regional totals may not add exactly due to rounding.

Source: USDA, Federal Grain Inspection Service; YTD= year-to-date; n/a = not applicable or no change.

Figure 13

U.S. grain inspected for export (wheat, corn, and soybeans)

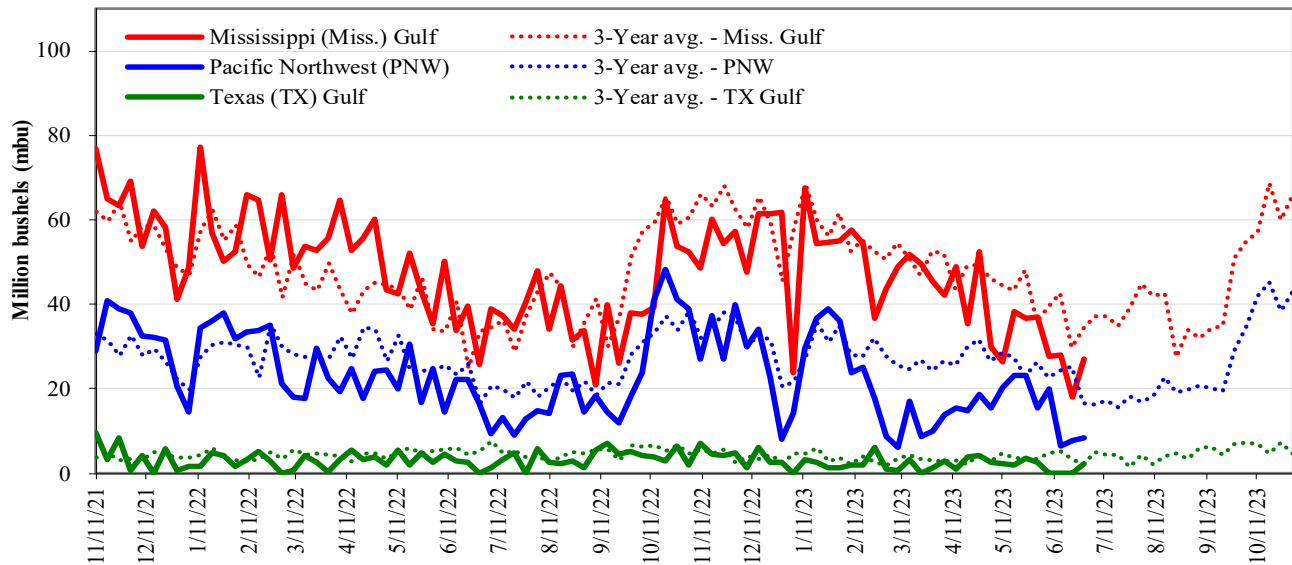


Note: 3-year average consists of 4-week running average.

Source: USDA, Federal Grain Inspection Service.

Figure 14

U.S. Grain inspections: U.S. Gulf and PNW¹ (wheat, corn, and soybeans)



Week ending 06/29/23 inspections (mbu):		Percent change	MS Gulf	TX	U.S. Gulf	PNW
MS Gulf:	27.0	Last wk:	up 50	n/a	up 62	up 10
PNW:	8.4	Last Year (same wk):	up 5	n/a	up 14	down 49
TX Gulf:	2.2	3-yr avg. (4-wk. mov. Avg):	down 26	down 44	down 28	down 62

Source: USDA, Federal Grain Inspection Service.

Ocean Transportation

Table 16

Weekly port region grain ocean vessel activity (number of vessels)

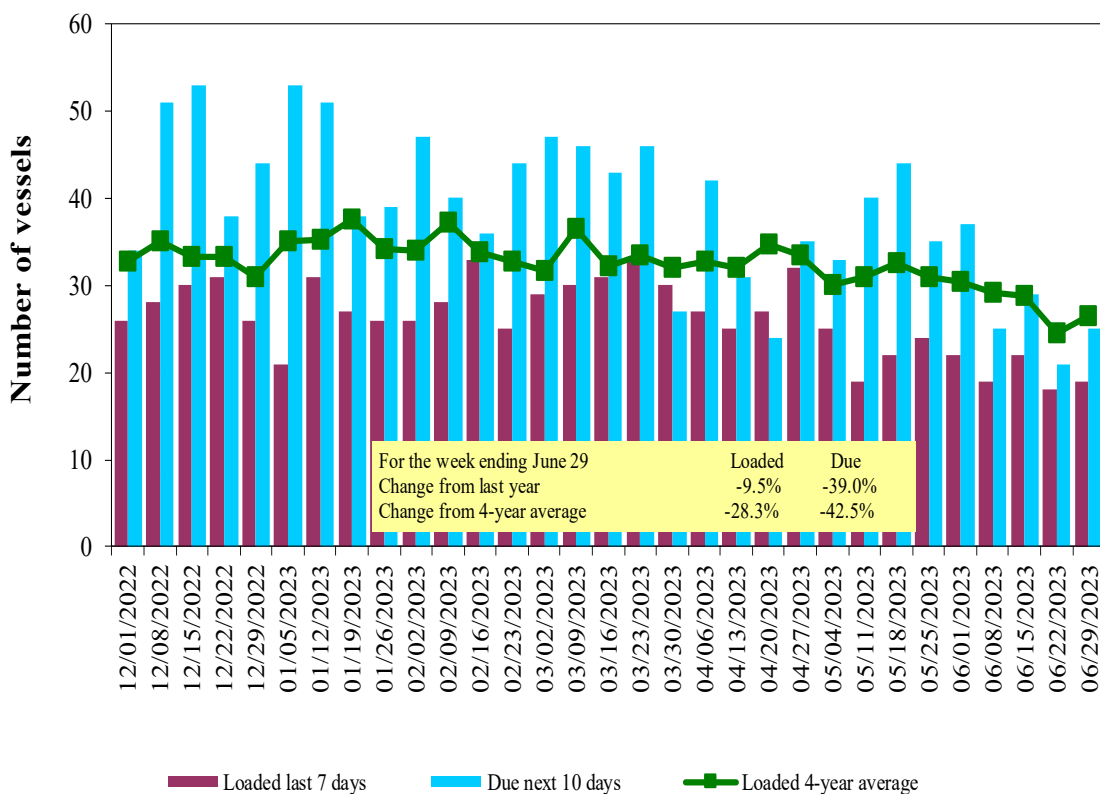
Date	Gulf			Pacific Northwest
	In port	Loaded 7-days	Due next 10-days	In port
6/29/2023	21	19	25	5
6/22/2023	21	18	21	5
2022 range	(14...61)	(18...39)	(28...62)	(5...23)
2022 average	30	28	44	13

Note: The data is voluntarily collected and may not be complete.

Source: USDA, Agricultural Marketing Service.

Figure 15

U.S. Gulf¹ vessel loading activity

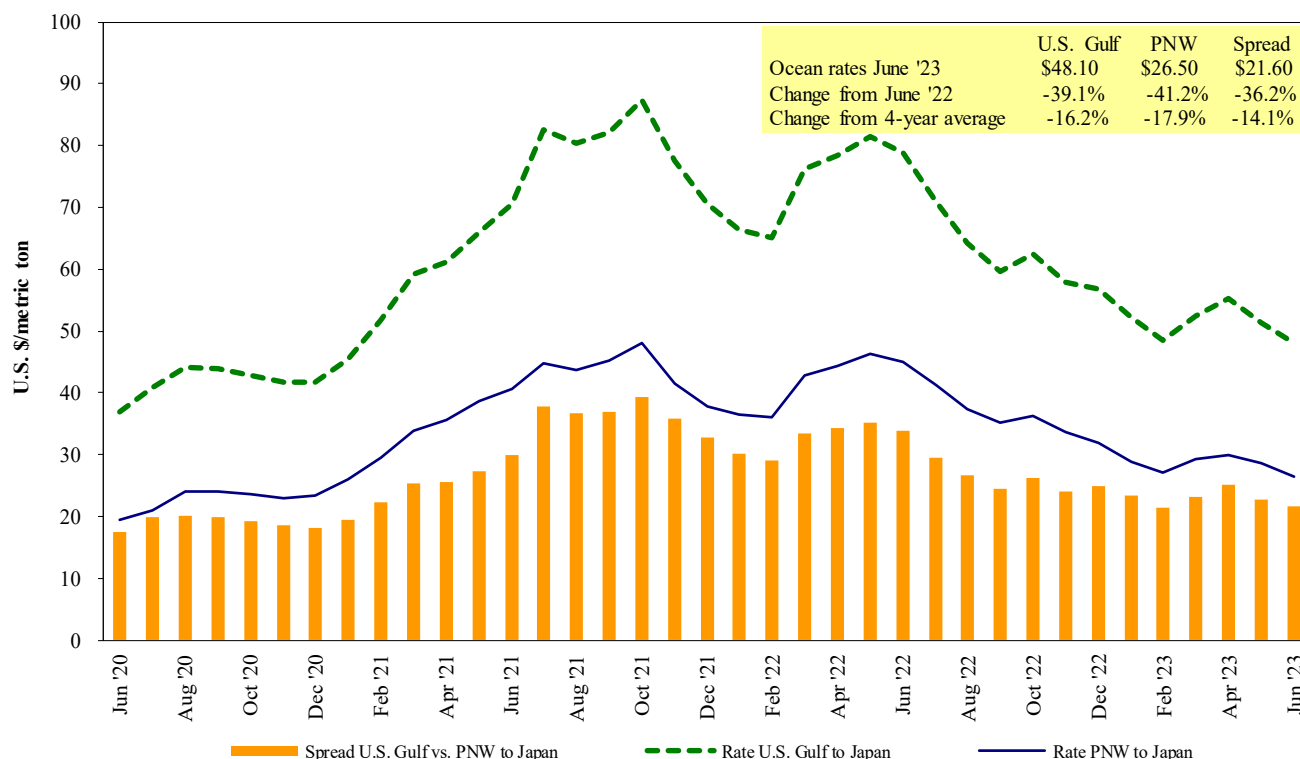


¹U.S. Gulf¹ includes Mississippi, Texas, and East Gulf.

Source: USDA, Agricultural Marketing Service.

Figure 16

Grain vessel rates, U.S. to Japan



Note: PNW = Pacific Northwest.

Source: O'Neil Commodity Consulting.

Table 17

Ocean freight rates for selected shipments, week ending 07/01/2023

Export region	Import region	Grain types	Loading date	Volume loads (metric tons)	Freight rate (US\$/metric ton)
U.S. Gulf	Japan	Heavy grain	May 2, 2023	50,000	56.70
U.S. Gulf	Japan	Heavy grain	May 1, 2023	50,000	54.80
U.S. Gulf	Japan	Heavy grain	Nov 1/10, 2022	50,000	79.25
U.S. Gulf	S. China	Corn	Aug 1/10, 2022	68,000	71.00
U.S. Gulf	Kenya	Sorghum	Feb 15/25, 2023	22,820	63.30*
U.S. Gulf	Jamaica	Wheat	Jun 20/30, 2023	4,400	63.00 op 66.00
PNW	Indonesia	Soybean Meal	Jul 21/31, 2023	35,000	106.00*
PNW	N. China	Heavy grain	Apr 21/27, 2023	63,000	28.00
PNW	N. China	Heavy grain	May 1/4, 2023	66,000	29.00
Brazil	S. Korea	Heavy grain	Jun 15/Jul 15, 2023	68,000	45.15
Brazil	S. Korea	Soybean Meal	Jun 1, 2023	60,000	53.75
Brazil	China	Heavy grain	Jul 1/31, 2023	63,000	41.50
Brazil	China	Heavy grain	May 5/10, 2023	65,000	36.50
Brazil	N. China	Heavy grain	Apr 21/30, 2023	66,000	40.60
Brazil	Vietnam	Heavy grain	Apr 11/29, 2023	66,000	37.00
Australia	Vietnam	Heavy grain	Feb 24/Apr 9, 2023	60,000	20.80

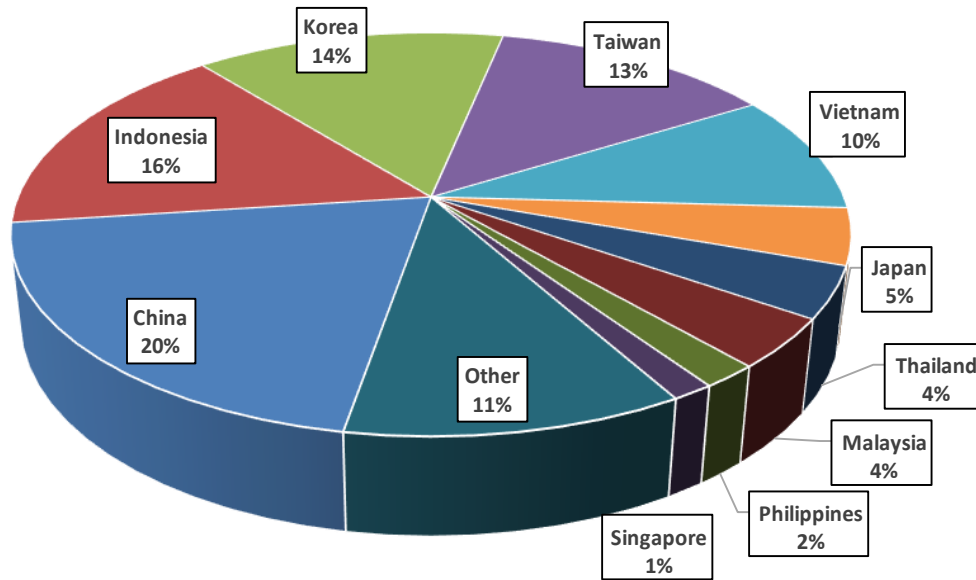
*50 percent of food aid from the United States is required to be shipped on U.S.-flag vessels.

Note: Rates shown are per metric ton (2,204.62 lbs. = 1 metric ton), free on board (F.O.B), except where otherwise indicated; op = option.

Source: Maritime Research, Inc.

In 2020, containers were used to transport 10 percent of total U.S. waterborne grain exports. Approximately 66 percent of U.S. waterborne grain exports in 2020 went to Asia, of which 14 percent were moved in containers. Approximately 95 percent of U.S. waterborne containerized grain exports were destined for Asia.

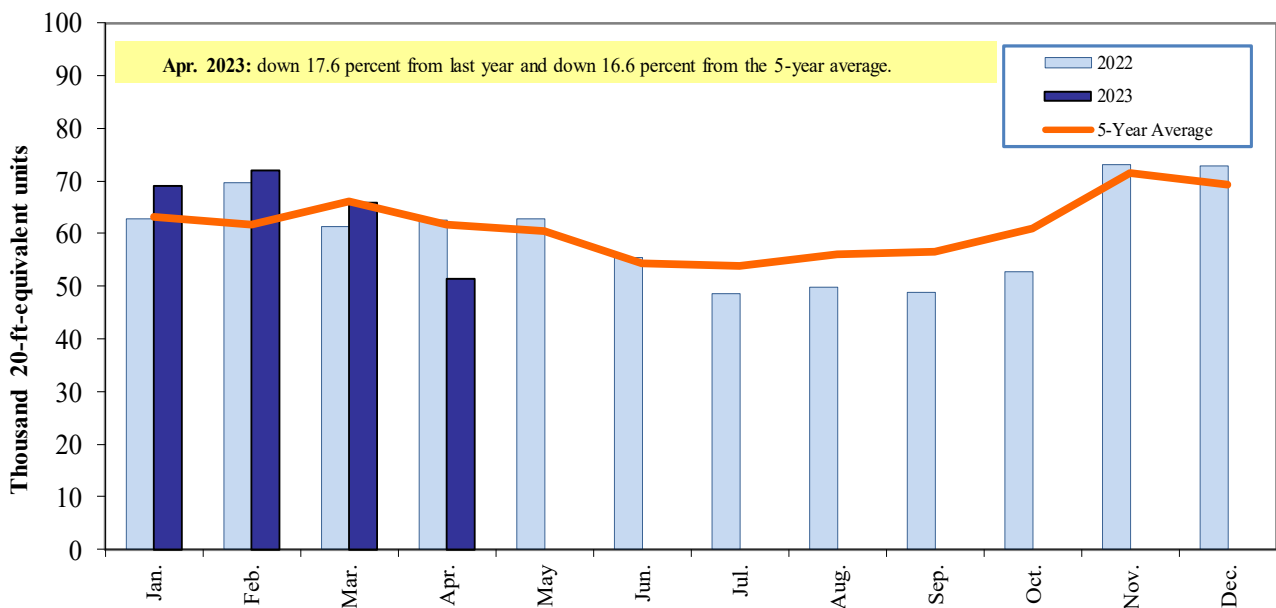
Figure 17
Top 10 destination markets for U.S. containerized grain exports, Jan-Apr 2023



Note: The following Harmonized Tariff Codes are used to calculate containerized grains movements: '1001', '100190', '1002', '100200', '1003', '100300', '1004', '100400', '1005', '100590', '1007', '100700', '110100', '1102', '110220', '110290', '1201', '120100', '120190', '120810', '230210', '230310', '230330', '2304', and '230990'.

Source: USDA, Agricultural Marketing Service, Transportation Services Division analysis of PIERs data.

Figure 18
Monthly shipments of U.S. containerized grain exports



Note: The following Harmonized Tariff Codes are used to calculate containerized grains movements: '1001', '100190', '1002', '100200', '1003', '100300', '1004', '100400', '1005', '100590', '1007', '100700', '110100', '1102', '110220', '110290', '1201', '120100', '120190', '120810', '230210', '230310', '230330', '2304', and '230990'.

Source: USDA, Agricultural Marketing Service, Transportation Services Division analysis of PIERs data.

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Preferred citation: U.S. Department of Agriculture, Agricultural Marketing Service. *Grain Transportation Report*. July 6, 2023. Web: <http://dx.doi.org/10.9752/TS056.07-06-2023>

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